

### ABSTRACT OF THE DISCLOSURE

The invention provides for the methods of modulating an immune response in an individual by administration of a thione-forming disulfide (TFD).

Immunomodulatory responses include, but are not limited to, increased natural killer cell activity, expansion of NK cell population, decreased B cell population, decreased antibody production, and increased mitogenic potential. Methods of modulating such immune responses and the uses of immunomodulation are provided herein.